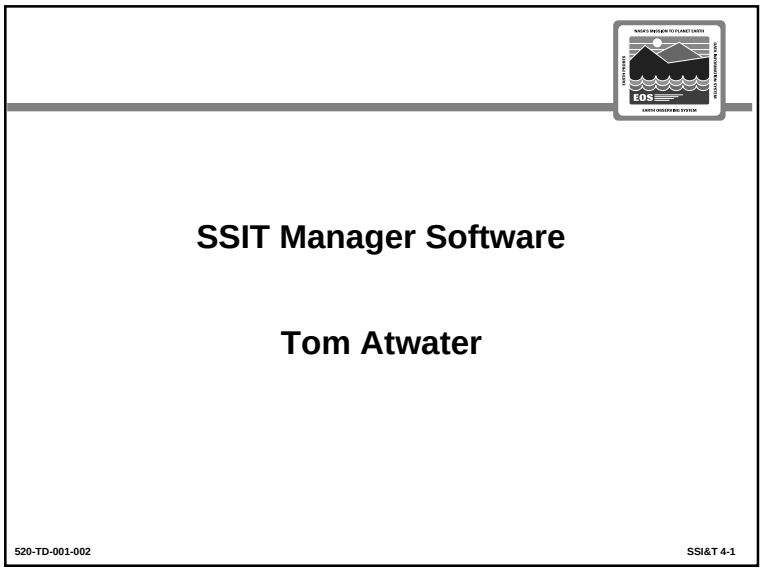


Discussion Topics

In performing the science software integration and testing you will use the SSIT manager as the interface environment from which you can launch different tools.

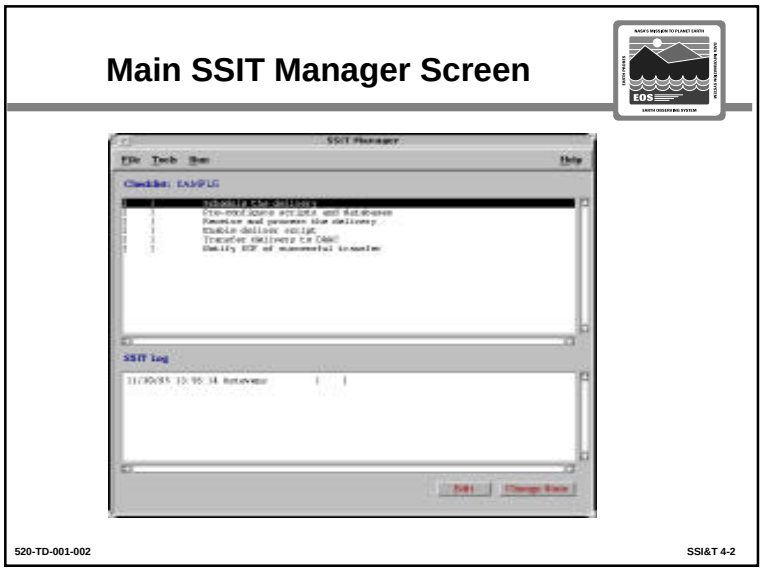
One of the first activities that need to be done is to make sure that the SSIT Manager is properly configured to run on the DAAC Ir1 system. You may want to consult with M&O at the DAAC to configure the SSIT Manager.

In this lesson we will talk about the SSIT Manager and the different things that you can do within the manager.

Run SSIT Manager

- Check that the SSIT Manager runs by typing:

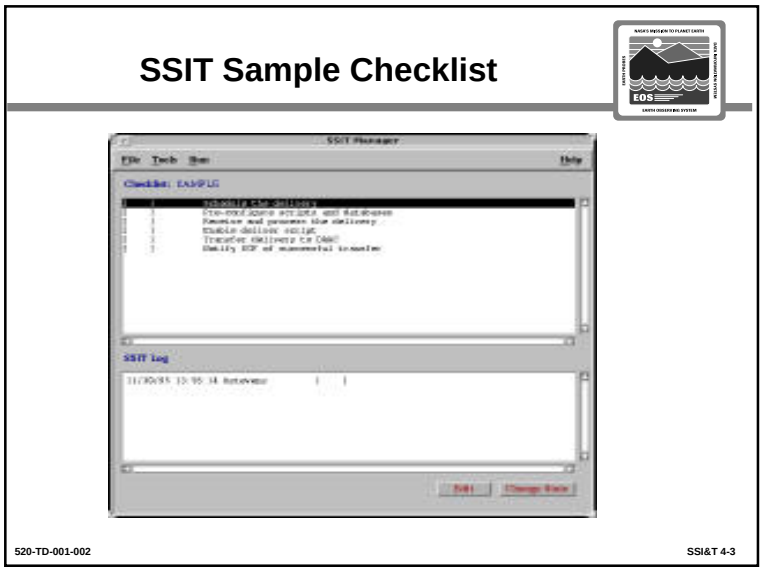
  unix% DpAtMgr &



Discussion Topics

This is the main SSIT manager screen.

From here you can launch most of the tools that you may need to integrate and test the science software at the DAAC.



Discussion Topics

- Discuss the purpose of the checklist

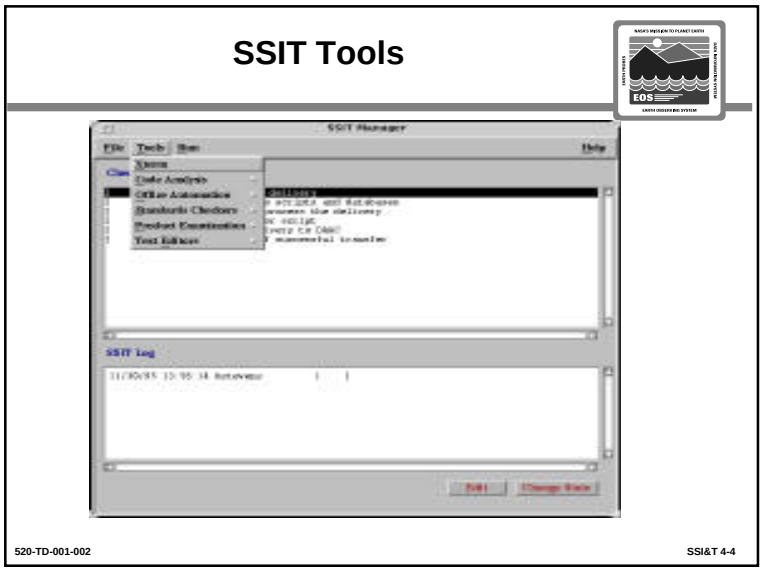
You can create your own checklist by editing a specific file.

The file name is found in the PCF.

The checklist is designed to let you keep track of the activities that you need to perform and to check the ones that you've completed.

Note: The SSIT manager does not automatically check the items. You must do it manually. The way to check an item as complete is as follows:

- klick on the desired activity which is comleted
- klick on the "Change Status" button
- type DONE
- This tags that activity as being done.
- Discuss how to create/edit the checklist
- Discuss SSIT LOG
  - Implementation
  - Log file maintenance



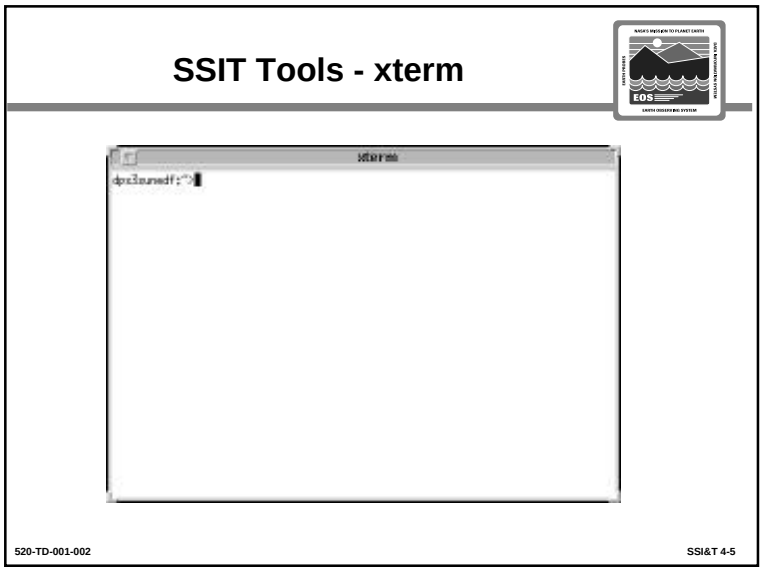
Discussion Topics

Discuss the five categoris of tools available for testing and integrating the science software, namely

- Code Analysis tools
- Office automation tools
- Standards Checkers
- Product examination
- Text editors

In the next few slides, we will briefly discuss each of the tools that you will be using.

In the coming lessons, each of these groups of tools will be discussed in detail. You will have a chance to integrate and test science code using the appropriate tools.

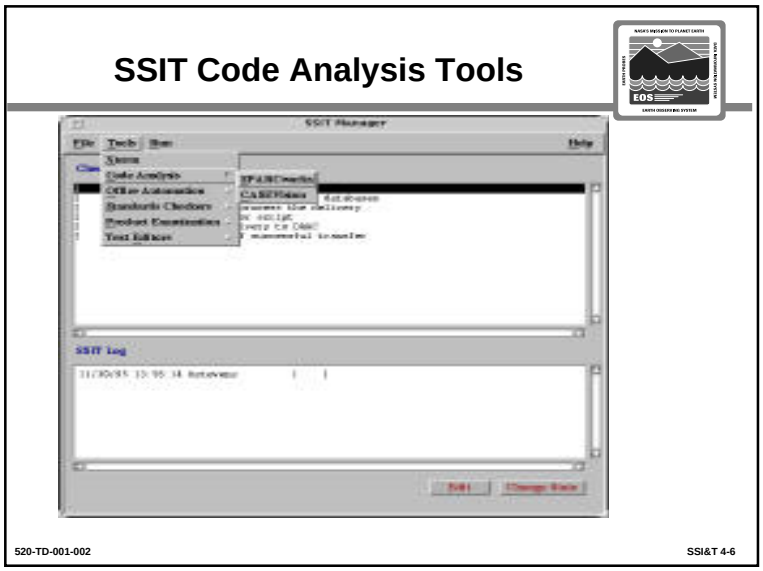


Discussion Topics

You can open another xterm session by selecting the Xterm option from the pull-down menu.

You can also do that directly from Unix command line.

You can configure the appearance of the xterm by editing your process control file.



Discussion Topics

Code analysis tools are used for ad hoc analysis of science software.

SPARCworks

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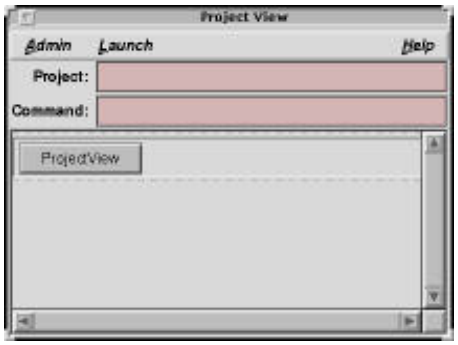
Discussion Topics

Explain purpose and function of SPARCWorks

CASEVision



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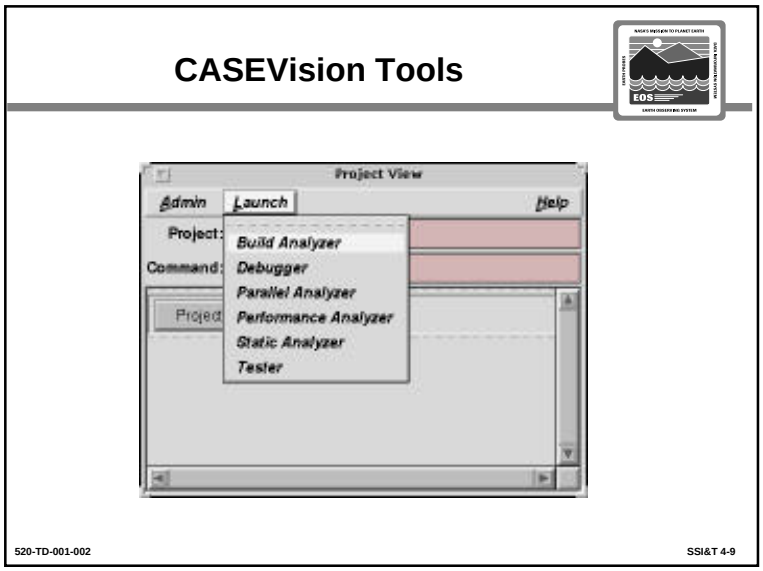
Discussion Topics

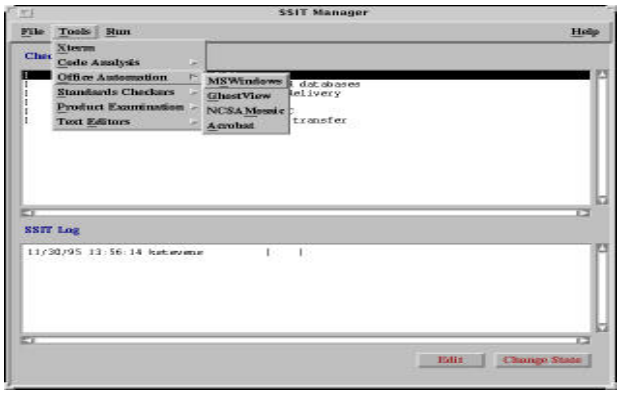
Explain purpose and function of CASEVision



Discussion Topics

Briefly explain CASEVision tools

Office Automation Tools



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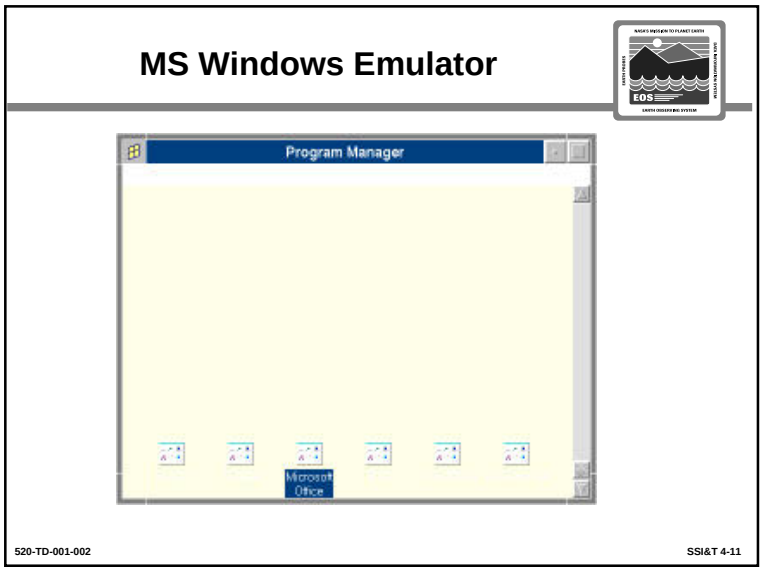
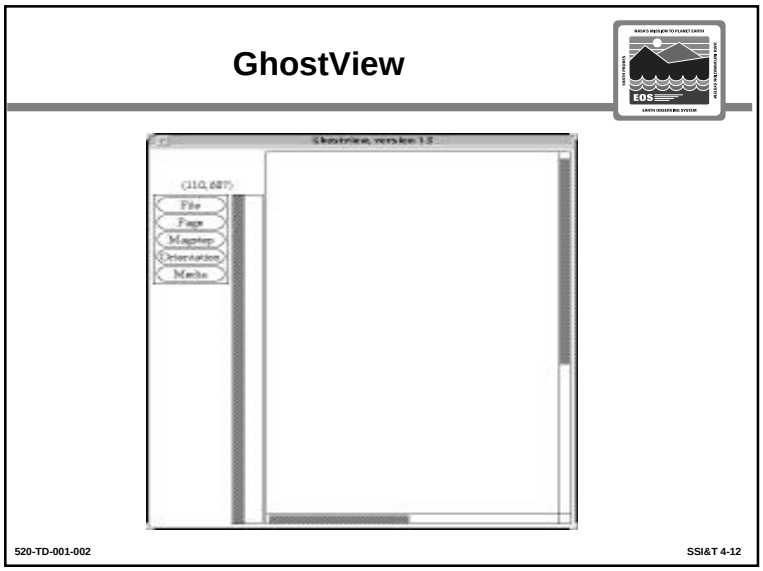
Discussion Topics



Discussion Topics

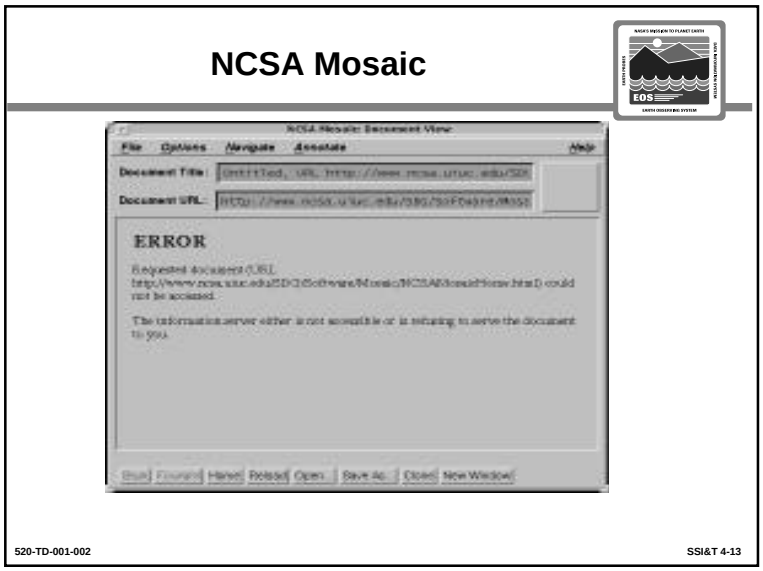
Explain the purpose and function of Windows Emulator



Discussion Topics

Explain purpose and function of GhostView.

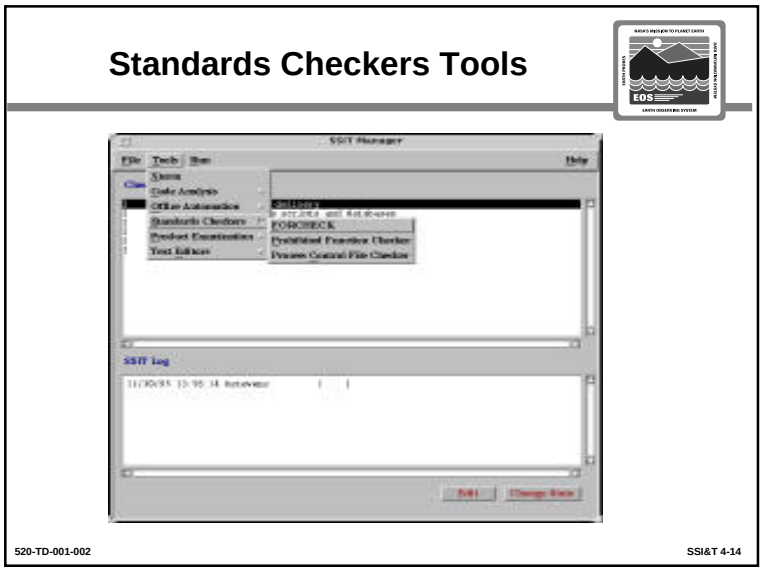
GhostView is a postscript file viewer.



Discussion Topics

NCSA Mosaic has several purposes in Ir1:

- Communicate with other locations
- Access ECS documentation
- Report potential problems encountered



Discussion Topics

One of the main SSI&T activities is to ensure that the science code conforms to ANSI/POSIX standards. The SSIT Manager allows you to launch tools to check for standards compliance.

The tools provided are:

- FORCHECK
- Prohibited Function Checker
- Process Control File Checker

FORTRAN Checker

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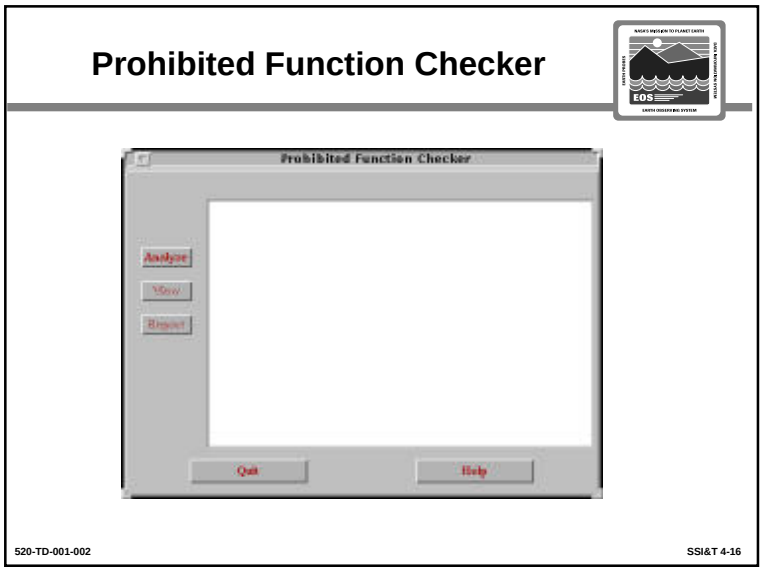
Discussion Topics

Explain purpose and function of FORCHECK

This tool allows you to check for global and local options



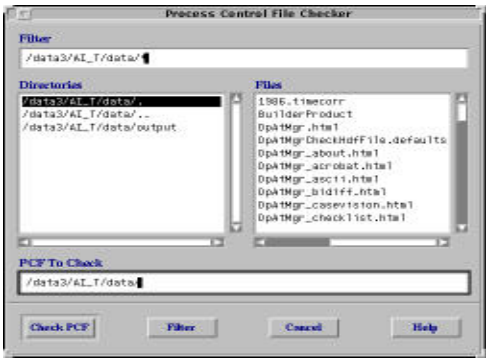
Discussion Topics

Explain purpose and function of Prohibited Function Checker.

Checks if certain functions are used in the science software which conflict with the production environment.

The list of prohibited functions is in the PCF.

Process Control File Checker



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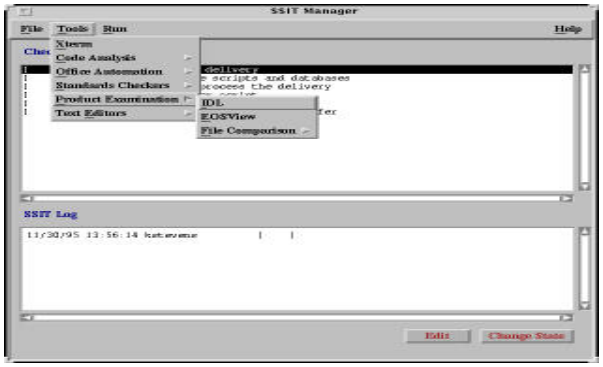
Discussion Topics

Explain purpose and function of PCF Checker.

This tool checks the syntax of the code in the PCF.

Product Examination Tools



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Discussion Topics

Product examination tools are used to compare the outputs generated at the SCF with the ones generated at the DAAC using the SCF version of the SDP toolkit and the DAAC version.

IDL

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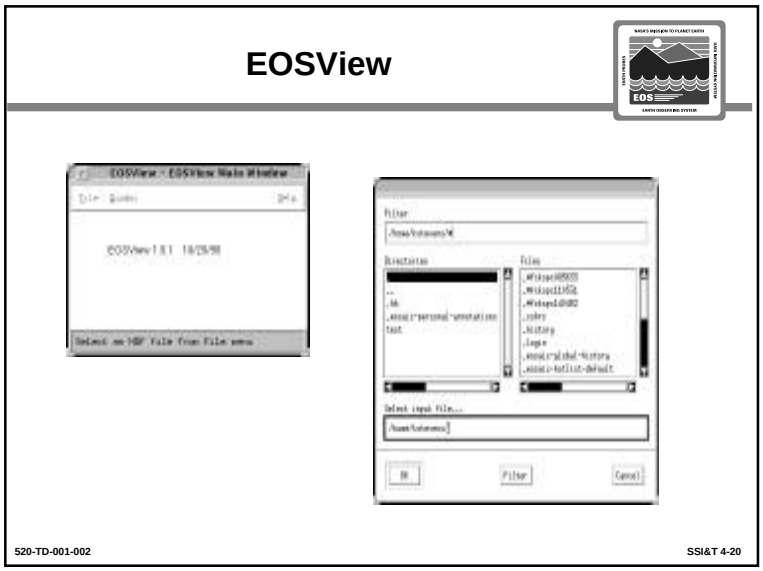
Discussion Topics

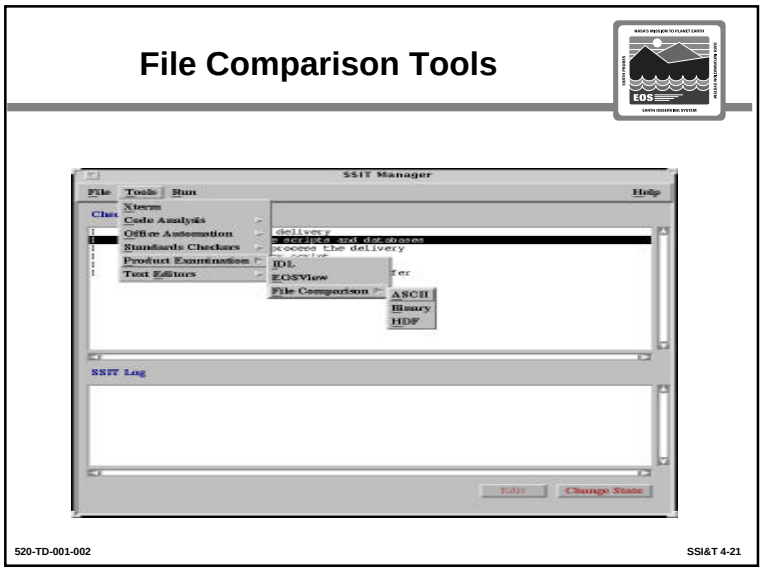
Explain purpose and function of IDL



Discussion Topics

Explain purpose and function of EOSView.

EOSView displays the HDF files and metadata files.



Discussion Topics

We want to make sure that the output that generated at the SCF when running the science software is the same output that is generated at the DAAC.

The SSIT Manager provides tools to compare outputs of the science software between the DAAC and the SCF.

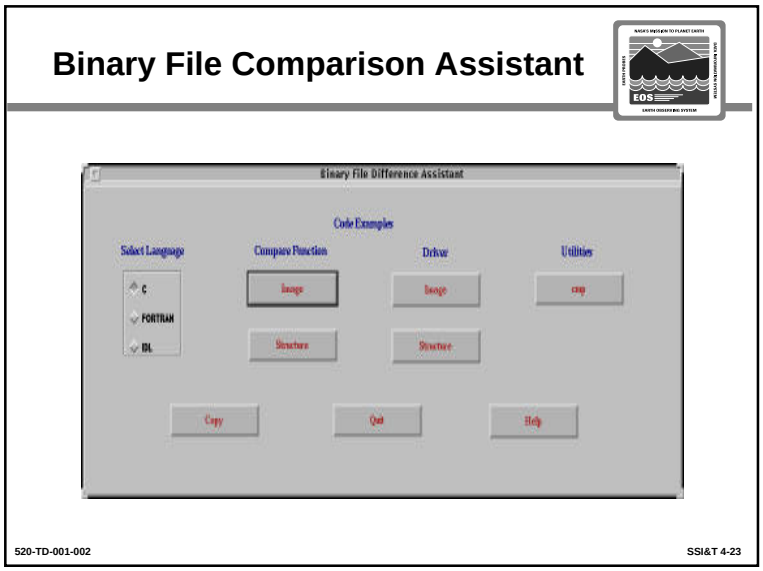
The tools are:

- ASCII file comparison
- Binary file comparison
- Hierarchical Data Files (HDF) comparison

Discussion Topics

Explain purpose and function of ASCII file comparison.

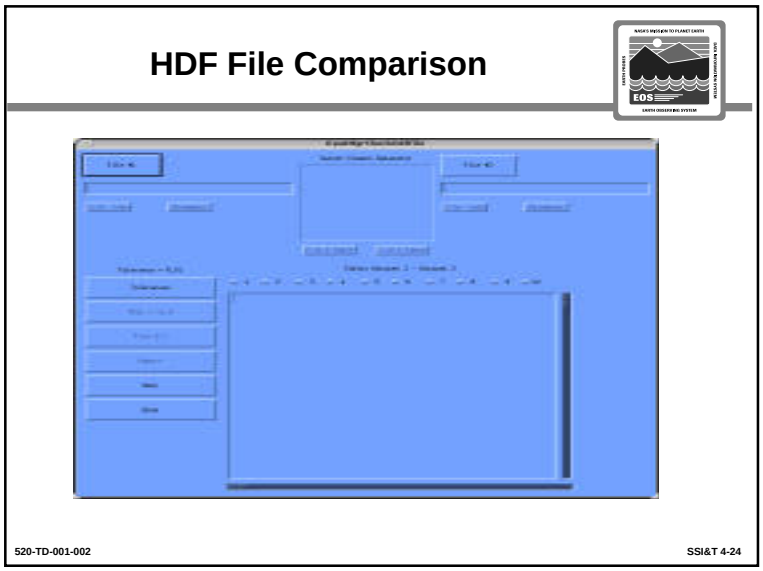
brings up xdiff, which shows one file in one column and another file in the second column. Both files can then be scrolled and visually compared.



Discussion Topics

Explain purpose and function of Binary file comparison Assistant.

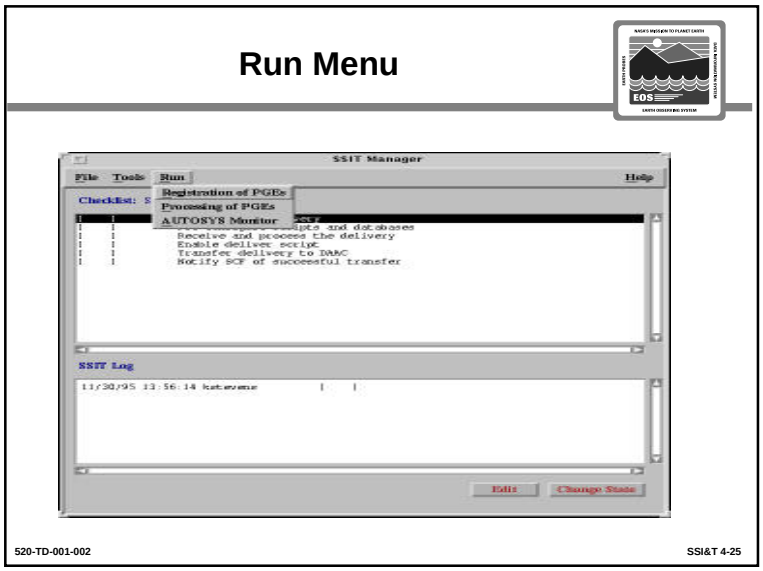
This is a template to help the user compare two binary files.



Discussion Topics

Explain purpose and function of HDF file comparison.

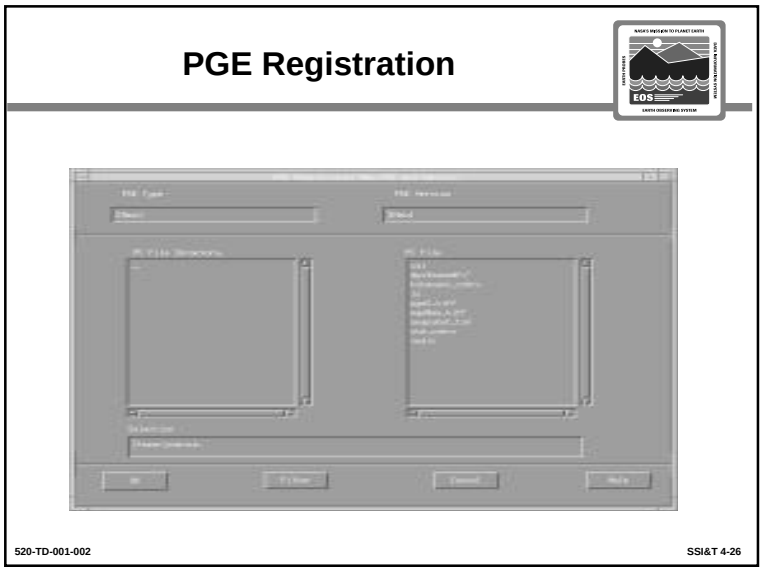
This tool enables the user to compare two HDF file outputs. You can specify the comparison tolerance level (the instrument team should provide this information). You can also specify the number of data sets to compare at the same time.



Discussion Topics

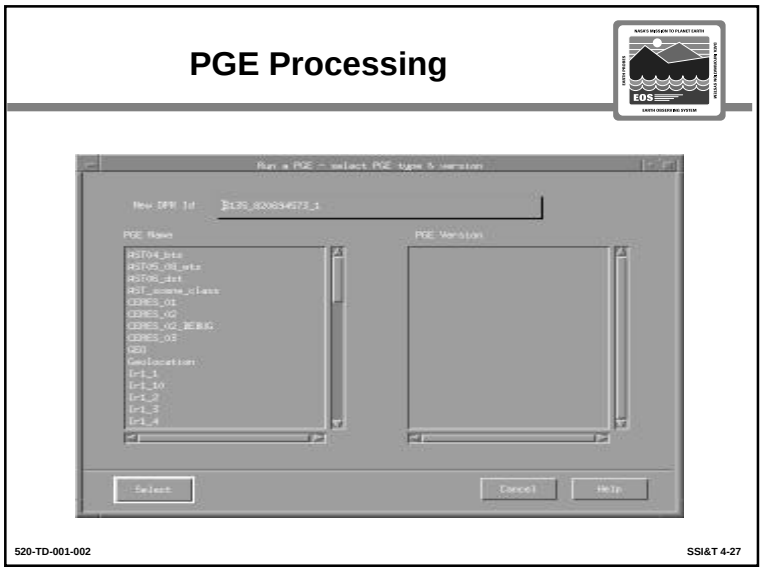
Purpose of Run Menu

- User configurable for adding any user-defined scripts, programs, etc.
- PDPS PGE Registration/execution



Discussion Topics

Once the PGE (and associated files) check out OK, they can then be registered into PDPS to become part of the production system. This GUI provides the mechanism to register the PGE by allowing the user to name the PGE and give it a version number.



Discussion Topics

Once the PGE in resistered into PDPS, we can then run it as a Data Production Request. The purpose is to use the same PGE to process different science data.

PGE Monitoring

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Discussion Topics

When we run a PGE, we can then track its processing status through AutoSys. AutoSys will be discussed in detail in a later lesson.